

- B&G*
- D/C*
- (a) cause said transmitter station to generate an instruct-to-embed signal effective to cause said one of a broadcast and a cablecast transmitter station to cease embedding one of first data and a first control signal, and embed one of second data and a second control signal in said one of a broadcast and a cablecast information transmission; and
- (b) cause a receiver station to generate an instruct-to-embed signal effective to cause said one of a broadcast and a cablecast transmitter station to cease embedding one of first data and a first control signal, and embed one of second data and a second control signal in said one of a broadcast and a cablecast information transmission;
- (3) receiving a transmitter control signal which operates at said transmitter station to communicate said instruct-to-embed signal to said at least one transmitter at said transmitter station [transmitter]; and
- (4) transmitting said one of a broadcast and a cablecast information transmission, said instruct-to-embed signal and said transmitter control signal.

II. REMARKS

A. Introduction

The Final Office Action dated February 18, 1998 (Final Office Action) has been carefully reviewed and the foregoing amendments made in response thereto.

Claims 3 & 4 are amended. Claims 2-39 are pending in the application.

Claims 2-39 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 2-4 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention.

Claims 2-39 are indicated as allowable if rewritten or amended to overcome the rejections under 35 U.S.C. § 112, first and second paragraphs.

Claims 2-39 remain active in this application. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

B. Summary of Amendments

Claim 3 has been amended to recite "one of a broadcast and a cablecast information transmission" for every occurrence of the single word, "information."

Claim 4 has been amended to recite "said at least one transmitter at said transmitter station," in place of "said transmitter station transmitter." This has been made to made the body of the claim language more consistent with the preamble language.

C. Response to Requirement Imposed Upon Applicants to Resolve Alleged Conflicts Between Applicants' Applications.

Applicants respectfully traverse the requirements of the Final Office Action paragraph 7.

Paragraph 7 of the Final Office Action requires Applicants to either:

- (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; or
- (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or

(3) resolve all conflicts between claims in the related 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications.

In addition, Examiner states that failure to comply with any one of these requirements will result in abandonment of the application.

Examiner states that the requirement has been made because conflicts exist between claims of the related co-pending applications, including the present application. Examiner sets forth only the serial numbers of the co-pending applications without an indication of which claims are conflicting. Examiner has also attached an Appendix providing what is deemed to be clear evidence that conflicting claims exist between the 328 related co-pending applications and the present application. Further, Examiner states that an analysis of all claims in the 328 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

Applicants respectfully traverse these requirements in that Examiner has both improperly imposed the requirements, and has incorrectly indicated that abandonment will occur upon failure to comply with the requirement. Applicants' traversal is supported by the fact that 37 C.F.R. § 1.78 (b) does not, under the present circumstances, provide Examiner with authority to require Applicants to either: 1) file terminal disclaimers; 2) file an affidavit; or 3) resolve all apparent conflicts. Additionally, the penalty of abandonment of the instant application for failure to comply with the aforementioned requirement is improper for being outside the legitimate authority to impose abandonment upon an application. The following remarks in Section (B) will explain Applicants' basis for this traversal.

1. The PTO's New Requirement is an Unlawfully Promulgated Substantive Rule Outside the Commissioner's Statutory Grant of Power

The PTO Commissioner obtains his statutory rulemaking authority from the Congress through the provisions of Title 35 of the United States Code. The broadest grant of rulemaking authority -- 35 U.S.C. § 6 (a) -- permits the Commissioner to promulgate regulations directed only to "the conduct of proceedings in the [PTO]". This provision does NOT grant the Commissioner authority to issue substantive rules of patent law. *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 U.S.P.Q.2d 1677, 1686 (Fed Cir. 1991).¹ Applicants respectfully submit that the Examiner's creation of a new set of requirements based upon 37 CFR § 1.78(b) constitutes an unlawful promulgation of a substantive rule in direct contradiction of a long-established statutory and regulatory scheme.

2. The PTO's Requirement is a Substantive Rule

The first determination is whether the requirement as imposed by the PTO upon Applicants is substantive or a procedural rule. The Administrative Procedure Act offers general guidelines under which all administrative agencies must operate. A fundamental premise of administrative law is that administrative agencies must act solely within their statutory grant of power. *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). The PTO Commissioner has NOT been granted power to promulgate substantive rules of patent law. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 U.S.P.Q.2d 1677, 1686 (Fed. Cir. 1991).

¹Accord *Hoechst Aktiengesellschaft v. Quigg*, 917 F.2d 522, 526, 16 U.S.P.Q.2d 1549, 1552 (Fed Cir. 1990); *Glaxo Operations UK Ltd. v. Quigg*, 894 F.2d 392, 398-99, 13 U.S.P.Q.2d 1628, 1632-33 (Fed. Cir. 1990); *Ethicon Inc. v. Quigg*, 849 F.2d 1422, 1425, 7 U.S.P.Q.2d 1152, 1154 (Fed. Cir. 1988).

The appropriate test for such a determination is an assessment of the rule's impact on the Applicant's rights and interests under the patent laws. *Fressola v. Manbeck*, 36 U.S.P.Q.2d 1211, 1215 (D.D.C. 1995). As the PTO Commissioner has no power to promulgate substantive rules, the Commissioner receives no deference in his interpretation of the statutes and laws that give rise to the instant requirement. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed Cir. 1996), citing, *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). When agency rules either (a) depart from existing practice or (b) impact the substantive rights and interests of the effected party, the rule must be considered substantive. *Nat'l Ass'n of Home Health Agencies v. Scheiker*, 690 F.2d 932, 949 (D.C. Cir. 1982), cert. denied, 459 U.S. 1205 (1983).

a. **The PTO Requirement is Substantive Because it Radically Changes Long Existing Patent Practice by Creating a New Requirement Upon Applicants Outside the Scope of 37 C.F.R. § 1.78 (b)**

The Examiner's requirement is totally distinguishable from the well articulated requirement authorized by 37 CFR § 1.78 (b), because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective final double patenting rejection without the PTO's affirmative double patenting rejection of the claims. Long existing patent practice recognizes only two types of double patenting, double patenting based on 35 U.S.C. § 101 (statutory double patenting) and double patenting analogous to 35 U.S.C. § 103 (the well-known obviousness type double patenting).² These two well established types of double

²MPEP § 804(B)(1) states, in an admittedly awkward fashion, that the inquiry for obviousness type double patenting is analogous to a rejection under 35 U.S.C. 103: "since the analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 U.S.C. 103 rejection, the factual inquires set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis".

patenting use an objective standard to determine when they are appropriate³ and have a determinable result on the allowability of the pending claims.

The Examiner's new requirement represents a radical departure from long existing patent practice relevant to conflicting claims between co-pending applications of the same inventive entity. Two well established double patenting standards are based on an objective analysis of comparing pending and *allowed* claims. However, in the present application, there are no *allowed* claims. The Examiner's new requirement to avoid a double patenting rejection presumes that conflicts exist between claims in the present application and claims in the 327 copending applications. This presumption of conflicts between claims represents a radical departure from long existing patent practice as defined by 37 C.F.R. § 1.78 (b), which states:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Clearly, the only requirement authorized by the rule is the elimination of conflicting claims from all but one application where claims have been determined to exist. Furthermore, in order to determine that conflicting claims do in fact exist in multiple applications, the only possible analysis is obviousness-type double patenting, since there are no allowed or issued claims by which to employ the 35 U.S.C. § 101 statutory double patenting analysis. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

³ The objective test for same invention double patenting is whether one of the claims being compared could be literally infringed without literally infringing the other. The objective test for obviousness type double patenting is the same as the objective nonobviousness requirement of patentability with the difference that the disclosure of the first patent may not be used as prior art.

In summary, the Examiner's new requirement departs from long-established practice because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective final double patenting rejection without the PTO's affirmative double patenting rejection of the claims.

Therefore, the Examiner's new requirement departs from existing practice and therefore is a **substantive rule** beyond the authority of the PTO and is therefore, invalid.

b. The New Requirement is Also a Substantive Rule Because it Adversely Impacts the Rights and Interests of Applicants to Benefits of the Patent

The rights and benefits of a U.S. patent is solely a statutory right. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed Cir. 1996). The essential statutory right in a patent is the right to exclude others from making, using and selling the claimed invention during the term of the patent. Courts have recognized that sometimes new procedural rules of the PTO are actually substantive rules, e.g. when the new rule made a substantive difference in the ability of the applicant to claim his discovery. *Freesola v. Manbeck*, 36 U.S.P.Q.2d 1211, 1214 (D.D.C. 1995) (emphasis added), citing, *In re Pilkington*, 411 F.2d 1345, 1349; 162 U.S.P.Q. 145 (C.C.P.A. 1969); and *In re Steppan*, 394 F.2d 1013, 1019; 156 U.S.P.Q. 143 (C.C.P.A. 1967).

The new requirement, on its face and as applied here, is an instance of a PTO rule making a substantive difference in Applicants ability to claim their invention and, therefore, must be considered a substantive rule. The requirement denies Applicants rights and benefits expressly conferred by the patent statute. The measure of the value of these denied rights and benefits is that the requirement, as applied here, would deny Applicants the full and complete PTO examination of Applicants' claims on their merits, as specified by 37 C.F.R. § 1.105. In addition, to file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications

based on the PTO's incomplete examination on the merits would deny Applicants' the benefit of the full patent term of 17 years on each of Applicants' respective applications. Applicants respectfully submit that the requirement has a huge impact on their rights and interests in the presently claimed invention.

c. Conclusion: Substantive Rule

In summary, the requirement is a change to long existing practice and/or has a substantive impact on the rights and interests of Applicants to their invention. Either finding means that the new requirement is a substantive rule. Since the Commissioner has no power to issue substantive rules, the requirement is an improperly promulgated substantive rule having no force of law.

3. The PTO Requirement is Outside the Scope of 37 C.F.R. § 1.78 (b)

Rule 78 (b) states that:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

The only **requirement** that Rule 78 (b) authorizes is the elimination of conflicting claims from all but one co-pending applications.

In the instant Final Office Action, Examiner has not required the elimination of all conflicting claims from all but one application, but instead has required Applicants to: 1) file terminal disclaimers in each of the related 328 applications; 2) provide an affidavit; or 3) resolve all conflicts between claims in the related 328 applications. None of the options in the requirement is authorize by Rule 78 (b), and therefore Applicants respectfully submit that such a requirement is improper.

With respect to the PTO's authority to act within Rule 78 (b) regarding the rejection of conflicting claims, M.P.E.P § 822.01 states that:

Under 37 CFR § 1.78 (b), the practice relative to overlapping claims in applications copending before the examiner..., is as follows: Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, *a complete examination should be made of the claims of each application* and all appropriate rejections should be entered in each application, including rejections based upon prior art. *The claims of each application may also be rejected on the grounds of provisional double patenting on the claims of the other application* whether or not any claims avoid the prior art. Where appropriate, the same prior art may be relied upon in each of the applications. MPEP 822.01 (6th Ed., Rev. 3, 1997), (*emphasis added*).

In light of the requirement of the Final Office Action, M.P.E.P § 822.01 and 37 CFR § 1.78 (b) are not applicable since there has not been any rejection with regard to the elimination of conflicting claims from all but one co-pending application.

4. The Assertion That Failure to Comply with the Requirement Will Result in Abandonment of Applicants' Application is Improper

Applicants' prospective failure to comply with the above requirements cannot properly result in abandonment of the present application. Applicants respectfully submit that abandonment of an application can properly occur only:

- (1) for failure to respond within a provided time period (under Rule 135);
- (2) as an express abandonment (under Rule 138); or
- (3) the result of failing to timely pay the issue fee (under Rule 316).

There is no provision in the rules permitting abandonment for failure to comply with any of the presented requirements. To impose an improper requirement upon Applicants and then hold the application is to be abandoned for failure to comply with the improper requirement violates the rules of practice before the USPTO.

Furthermore, Examiner is in effect attempting to create a substantive rule which is above and beyond the rulemaking authority of the USPTO, and therefore is invalid.

In the *Application of Mott*, 539 F.2d 1291, 190 USPQ 536 (CCPA 1976), the applicant had conflicting claims in multiple applications. The CCPA held that action by Examiner which would result in automatic abandonment of the application was legally

untenable. *Id.* at 1296, 190 USPQ at 541. In the present application, Examiner has asserted that there are conflicting claims in multiple applications, and that non-compliance of the Final Office Action's requirement will result in an automatic abandonment. Therefore, under *Mott's* analysis, the Final Office Action's result of abandonment of Applicant's application is legally untenable.

5. Response to Apparent Conflict of Claims

Applicants submit that the presentation of the Final Office Action Appendix fails to demonstrate any conflicts between claims of the present application and claims of the co-pending applications. Rather, the Final Office Action Appendix compares representative claims of *other* applications in attempt to establish that "conflicting claims exist between the 328 related co-pending applications." Absent any evidence of conflicting claims between the Applicants' present application and any other of Applicants' co-pending applications, any requirement imposed upon Applicants to resolve such alleged conflicts is improper.

6. Request for Withdrawal of Requirement

Therefore, Applicants respectfully request that Examiner reconsider and withdraw the requirement that Applicants: (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or (3) resolve all conflicts between claims in the above identified 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications, which upon failing to do so will abandon the application.

7. Filing of Supplemental Oath

Notwithstanding the foregoing, Applicants will file a supplemental oath under 37 C.F.R. § 1.67 for each application when Examiner identifies allowable subject matter. Applicants respectfully propose that the filing of individual supplemental oaths attesting to the absence of claim conflicts between previously patented claims and subsequently allowed claims is a more reasonable method of ensuring the patentable distinctness of subsequently allowed claims.

Under 37 C.F.R. § 1.105, § 1.106 & § 1.78 (b), Examiner has the duty to make every applicable rejection, including double patenting rejection. Failure to make every proper rejection denies Applicants all rights and benefits related thereto, e.g., Applicants' right to appeal, etc. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

D. Information Disclosure Statement

The Applicants appreciate the Examiner's review of the Information Disclosure Statements filed 12/11/95, 12/23/95, 2/6/96, 4/17/96 & 4/7/97 and have addressed those specific concerns raised in the office action. It is the Applicants' understanding that the Examiner raised the following 5 issues:

- (1) the reasons for such a large number of references cited,
- (2) foreign language references cited without a statement of relevance or translation have not been considered,
- (3) the relevancy of numerous references listed in the Information Disclosure Statements are subsequent to the Applicants' latest effective filing date of 9/11/87,
- (4) citation of references apparently unrelated to the subject matter of the claimed invention, and

(5) citation of database search results listed in foreign languages where no copy was provided.

1. Reason for Citation of Large Number of References

The reason that the Applicants submitted such a large number of references in the Information Disclosure Statements was that a large portion of the information cited by the Applicants was brought to the Applicants' attention in the discovery processes in a previous litigation in the United States District Court for the Eastern District of Virginia (*Personalized Mass Media Corp. v. The Weather Channel, Inc.* Docket No. 2:95 cv 242) and an investigation by the International Trade Commission (*In the Matter of Certain Digital Satellite System (DSS) Receivers And Components Thereof*, No. 337 TA 392, which was direct to U.S. Pat. No. 5,335,277) regarding claims in the Applicants' related issued patents. The documents listed in the Information Disclosure Statement were cited during the previous litigation/investigative proceedings by the alleged infringers in the aforementioned proceedings as being relevant and material to patentability of the claims in the related patents. The Applicants submitted those materials in the Information Disclosure Statement to the PTO at the earliest possible time in order to file them in compliance with the 3 month requirement stated in the certification used to submit the Information Disclosure Statement before the Final Office Action was issued as is necessary under 37 CFR § 1.97 (c) (1). In such haste, entries were inadvertently submitted which do not appear on their face to be material to the patentability of the present application. Applicants have corrected this error with the submission of the corrected Information Disclosure Statement as shown in Appendix B. However, it is the Applicants' understanding that not all references cited must be material to patentability in order for such references to be considered. In § 609 of the MPEP, it states,

"[t]hese individuals also may want the Office to consider information for a variety of reasons: e.g., without first determining whether the information meets any particular standard of materiality, or because another patent office considered the information to be relevant in a counterpart or related

patent application filed in another country, or to make sure that the examiner has an opportunity to consider the same information that was considered by the individuals that were substantially involved in the preparation or prosecution of a patent application."

Applicants' position is that information that was considered material in previous litigation would fall into the 'variety of reasons' category as stated above. Applicants intention was not to confuse or make difficult the examination process for the Examiner, but was instead to be forthright and open in disclosing all information deemed to be relevant to the application in issue by third parties.

2. Citations of Foreign Language References

Applicants have re-examined the foreign references listed in all of the Information Disclosure Statements and have either eliminated such references from the list, included translations herewith or provided statements as to the relevancy of such references (APPENDIX A). The inclusion of translations with this response is in compliance with 37 C.F.R. § 1.97 (f) which states in part, "[I]f a bona fide attempt is made to comply with 37 C.F.R. § 1.98, but part of the required content is inadvertently omitted, additional time may be given to enable full compliance." The omission of any translations and/or relevancy statements for foreign references were inadvertent and unintentional and are herein submitted in accordance with 37 C.F.R. § 1.97 (f).

3. References in the Information Disclosure Statements Subsequent to Applicants' Latest Effective Filing Date of 9/11/87

Examiner stated "[n]umerous references listed in the IDS are subsequent to the applicant's latest effective filing date of 9/11/87, therefore, the relevancy of those references is unclear." Upon further examination, the Applicants have eliminated those patents and publications after the effective filing date for the present application. It is the Applicants' understanding that the effective for the present application is 9/11/87.

4. Citation of Unrelated References

Applicants appreciate the Examiner pointing out such references that were listed yet on their face appear to be unrelated to the subject matter of the present application. In response to such information, the Applicants have reviewed the cited references and removed any such references which appear to be unrelated on their face to the claimed subject matter such as the patent for a beehive, the patent for a chemical compound and numerous computer printout search results.

5. Citation of Database Search Results

Database search results listed in foreign languages where no copy was provided have been eliminated from the substitute Information Disclosure Statement included with this office action.

The Applicants' offer the corrected Information Disclosure Statement (APPENDIX B) as a substitute to the previously filed Information Disclosure Statement filed 4/7/97. No new entries have been entered, only citations which have, upon further examination, been determined not to be relevant to the claimed subject matter have been eliminated, typographical errors have been corrected, dates inserted where possible and the list shortened as a result. It is the Applicants' intention that such corrected Information Disclosure Statement will help clarify any issues previously raised by the Examiner and aid in the prosecution of the present patent application.

E. Response to Rejections under 35 U.S.C. § 112

1. First Paragraph Rejection: Specification Support of Claims 2-39

Paragraph 9 of the Final Office Action rejects claims 2-39 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art

the inventors, at the time the application was filed, had possession of the claimed invention.

The following tables list Applicants' claim language in the left column which corresponds to the specification support in the right column.

a. **Claim 2**

For example, see page 366 fine 19 through page 374, line 7 in example #9, including, **in a first embodiment:**

one of first data	For example, "said other signal information--for, (sic) example, teletext" at page 367, line 15-16.
and a first control signal	For example, "said other signal information" at page 367, lines 15-16, one of ordinary skill in the art would have understood that "other signal information" could include control information,
one of second data	For example., "said data file, DATA_OF.ITS" at page 370, line 15 (see also page 366, lines 11-15) with page 370, line 33 through page 371, line 3.
and a second control signal	For example, page 371, line 11 through page 372, line 6, including "program instruction set of Q" at page 371, line 33 (see also page 24, lines 14-16, page 484, lines 1-11, page 365, line 8, and regarding the commonality of examples #9 and #10, please see page 514, lines 8-27).

In a second embodiment:

one of first data	For example, "said data file, DATA_OF.ITS" at page 370, line 15 (see also page 366, lines 11-15) with page 370, line 33 through page 371, line 3.
and a first control signal	For example, page 371, line 11 through page 372, line 6, including "program instruction set of Q" at page 371, line 33 (see also page 24, lines 14-16, page 484, lines 1-11, page 365, line 8, and regarding the commonality of examples #9 and #10, please see page 514, lines 8-27).
one of second data	For example, "said other information--for, (sic) example, said teletext" at page 373, line 32.
and a second control signal	For example, "execution segment information addressed to receiver apparatus of said other information" at page 374, lines 1-3 (see also page 45,

	line 22-24.
--	-------------

For example, see page 381, line 11 through 389, line 13 in example #10, including, **in a third embodiment:**

one of first data	For example, "other information- -for example, said teletext" at page 382, lines 10-11.
and a first control signal	For example, "other signal information" at page 382, lines 10- 11. One of ordinary skill in the art would have understood that "other signal information" could include control information.
one of second data	For example, "said file, DATA_OF.ITS at page 384, line 21 (see also page 390, lines 1-6) with page 383, line 21 through page 385, line 2.
and a second control signal	For example, page 385, line 3 through page 386, line 14, including "program instruction set" at page 385, lines 11 and 29 and page 382, lines 3-4 (see also page 24 fines 14-16, page 484 lines 1-11).

In a fourth embodiment:

one of first data	For example, "said file, DATA_OF.ITS" at page 384, line 21 (see also page 380, lines 3-6) with page 383, line 21, through page 385, line 2.
and a first control signal	For example, page 385, line 3, through page 386, line 14, including 'program instruction set at page 385, lines 11 and 29 and page 382, lines 3-4 (see also page 24, lines 14-16, page 484, lines 1-11).
one of second data	For example, "other signal information ... for example, teletext" at page 388, lines 18-20.
and a second control signal	For example, "execution segment information addressed to appropriate URS receiver apparatus such as URS teletext receiver apparatus" at page 388, lines 21 - 23 (see also page 45 fine 22-24).

b. Claim 3

one of a remote broadcast and a remote cablecast transmitter station	For example, page 375, lines 3-4, including "The station of Fig. 6", with respect to page 381, line 11, through 389, line 13 in example #10. For example, "the station of Fig. 6" at page 341, line 29 with respect
--	---

	to page 366, line 19, through page 374, line 7 in example #9. For example, page 535, lines 18-22, including "identical to the intermediate station of Fig. 6" at, lines 19-20, with respect to pages 543, line 20, through page 546 line 23, (including "in the fashion of ... [example] #9" at page 546, line #9) and page 547, lines 19-26 (including "in the fashion of example #9" at, line 19) with respect to example #11.
at least one receiver for receiving information from at least one origination transmitter station	For example, "receiver, 53" at page 375, line 5 with regard to example #10. For example, page 355 lines 15-17 and "receiver, 53" at page 543, line 30 in regard to example #9. For example, "selected receiver apparatus" at page 539, lines 26 with regard to example #10.
one of first date and a first control signal	For example, "other information--for example, said teletext" at page 382, lines 10-11 in regard to example #10. For example, "said other signal information--for, (sic) example, teletext" at page 367, line 15-16 in regard to example #9. More generally, see the support for claim 2.
one of second data and a second control signal	For example, page 385, line 3 through page 386, line 14, including "program instruction set" at page 385, lines 11 and 29 and page 382, lines 3-4 (see also page 24, lines 14-16, page 484, lines 1-11) with regard to example #10. For example, "said data file, DATA _ OF.ITS" at page 370, line 15 (see also page 366, lines 11-15) with page 370, line 33 through page 371, line 3 with regard to example #9. More generally see the support for claim 2.

c. **Claim 4**

one of a remote broadcast and a remote cablecast transmitter station	For example, page 375 lines 3-4, including "The station of Fig. 6", with respect to page 381, line 11 through 389 line 13 in example #10. For example, "the station of Fig. 6" at page 341, line 29 with respect to page 366, line 19, through page 374, line 7 in example #9. For example, page 535, lines 18-22, including "identical to the intermediate station of Fig. 6" at, lines 19-20, with respect to pages 543, line 20 through page 546, line 23 (including "in the fashion of ... [example] #9" at page 546, line 9) and page 547, lines 19-26 (including "in the fashion of example #9"
--	--

	at, line 19) with respect to example #11.
at least one receiver for receiving information from at least one origination transmitter station	For example, "receiver, 53" at page 375, line 5 with regard to example #10. For example, page 355, lines 15-17 and "receiver, 53" at page 543, line 30 in regard to example #9. For example, "selected receiver apparatus" at page 539, lines 26- with regard to example #10.
one of first data and a first control signal	For example, "other information--for example, said teletext" at page 382, lines 10-11 in regard to example #10. For example, "said other signal information --for, (sic) example, teletext" at page 367, line 15-16 in regard to example #9. More generally, see the support for claim 2.
one of second data and a second control signal	For example, page 385, line 3 through page 386, line 14, including "program instruction set" at page 385, lines 11 and 29 and page 382, lines 3-4 (see also page 24, lines 14-16, page 484, lines 1-11) with regard to example #10. For example, "said data file, DATA _ OF.ITS" at page 370, line 15 (see also page 366, lines I I15) with page 370, line 33 through page 371, line 3 with regard to example #9. More generally see the support for claim 2.

d. **Claims 5**

first data and a first control signal	For example, page 548, lines 18-22, page 549, line 32 through page 550, line 1, page 551, lines 11-14, and page 555, line 25 through page 556, line 18 (including, for example, "local intermediate transmission stations" and "repeated" at page 556, lines 8-9 and 14 respectively) with respect to the support for the second embodiment and page 545, line 3 through page 546, line 23 (including "[example] #9" at page 546, line 17) and page 547, lines 19-26 (including "example #9" at, line 19).
---------------------------------------	--

e. **Claim 6**

first data and a first control signal	For example, page 357, line 20 through page 358, line 9, page 363, lines 9-24, page 364, lines 1-30, page 535, lines 22-31, and page 543, line 20 through page 545, line 2 with respect to the support, for the second
---------------------------------------	--

	embodiment and page 545, line 3 through page 546, line 23 (including "[example] #9" at page 546, line 17), and page 547, lines 19-26 (including "example #9" at, line 19).
--	--

f. **Claims 7 & 8**

First embodiment:

one of increasing and decreasing the size of the portion of said information transmission	For example, page 457, line 12 through page 463, line 29, including "maximizing the volume" and "greater the volume" at page 457, lines 23 and 29 respectively, page 458, lines 13-28, page 459, lines 17-24, and page 460, line 12 through page 461, line 8, and page 557, lines 26-32. For example, page 458, lines 28-35, page 462, lines 6-12, and page 557, lines 26-32.
---	---

Second embodiment:

one of increasing and decreasing the size of the portion of said information transmission	For example, page 457, line 12 through page 463, line 29, including "maximizing the volume" and "greater the volume" at page 457, lines 23 and 29 respectively, page 463, lines 15-29, and page 557, lines 26-32.
---	---

Third embodiment:

one of increasing and decreasing the size of the portion of said information transmission	For example, "broadcast print" and "data" at page 389, line 24, page 85, line 33 through page 86, line 11, page 44, lines 14-22 with respect to page 60, lines 25-27 as they relate to a control signal, and page 45, lines 18-19 with page 53, line 33 through page 54, line 8 as they relate to a control signal, For example, page 371, line 25 through page 372, line 6, or page 385, line 24 through page 386, line 3.
---	---

g. **Claim 10**

combining synch command in one of said first control signal and said second control signal	Claim 10 does not contain this language.
--	--

h. Claim 13

one of a data module and a meter-monitor segment in one of said first data and said second data	For example, "data module" at, line 15 of page 366, lines 11-15 and "meter-monitor information" at page 370, line 12 with respect to the second data in the support for the first embodiment of claim 2 and with respect to the first data in the support for the second embodiment of claim 2. For example, "data module" at line 6 in page 380, lines 3-6 and "data-monitor information" at page 384, lines 16-17 with respect to the second data in the support for the third embodiment of claim 2 and with respect to the first data in the support for the fourth embodiment of claim 2.
---	--

i. Claim 18

first control signal and said second control signal	For example, "program instruction set of Q" at page 371, line 33 in regard to the support for second control signal of the first embodiment of claim 2 and in regard to the support for first control signal of the second embodiment of claim 2, "program instruction set" at page 385, lines 11 and 29 (and "PROGRAM.EXE" at page 382, line 3 with "PROGRAM . EXE" and "program instruction set of Q.1 " at page 379 , lines 24 and 28 respectively) in regard to the support for second control signal of the third embodiment of claim 2 and in regard to the support for first control signal of the fourth embodiment of claim 2.
to deliver at least some of said one of said first data and said second data at one of a video display device and an audio speaker	For example, page 484, lines 1-18, page 487, lines 29-35, page 488, line 24-27, page 492, lines 23-30, page 501, line 12-25, and page 506, lines 17-21.

j. Claim 19

transmitting only some of said one of video programming and audio programming in a different portion	For example, page 367, lines 25-27. Additionally, for example, page 354, line 35, through page 355, line 14 and page 493, lines 14-20 with respect to page 492, lines 23-30. For example, page 490, lines 11-23 with respect to page 491, lines, 10-16.
--	---

k. Claim 24, 25, 32 & 33

First embodiment:

one of increasing and decreasing the size of the portion of said one of a broadcast and a cablecast information transmission	For example, page 457, line 12 through page 463, line 29, including "maximizing the volume" and "greater the volume" at page 457, lines 23 and 29 respectively, page 458, lines 13-28, page 459, lines 17-24, and page 460, lines 12 through page 461, line 8, and page 557, lines 26-12. For example, page 458, lines 28-35, page 462, lines 6-12, and page 557, lines 26-32.
--	--

Second embodiment:

one of increasing and decreasing the size of the portion of said one of a broadcast and a cablecast information transmission	For example, page 457, line 12 through page 463, line 29, including "maximizing the volume" and "greater the volume" at page 457, lines 23 and 29 respectively, page 463, lines 15-29, and page 557, lines 26-32.
--	---

Third embodiment:

one of increasing and decreasing the size of the portion of said one of a broadcast and a cablecast information transmission	For example, "broadcast print" and "data" at page 389, line 24, page 85, line 33 through page 86, line 11, page 44, lines 14-22 with respect to page 60, lines 25-27 as they relate to a control signal, and page 45, lines 18-19 with page 53, line 33, through page 54, line 8 as they relate to a control signal. For example, page 371, line 25 through page 372, line 6 or page 385, line 24 through page 386, line 3.
--	---

2. Second Paragraph Rejection

Claims 2-4 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention.

With respect to claim 3, as mentioned above in the summary of amendments section, claim 3 has been amended to recite "one of a broadcast and a cablecast information transmission" for every occurrence of the single word, "information."

With respect to claim 4, "said at least one transmitter at said transmitter station," has replaced "said transmitter station transmitter." This change has been made to make the body of the claim language more consistent with the preamble language.

3. Conclusion

Applicants respectfully submit that claims 2-39 and amended claims 3 & 4 of the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. *Credle v. Bond*, 25 F.3d 1556, 30 U.S.P.Q.2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *In re Warmerdam*, 33 F.3d 1354, 31 U.S.P.Q.2d 1754 (Fed. Cir. 1994). Applicants' have amended claim 5 to enhance clarity and respectfully submit that all pending claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter.

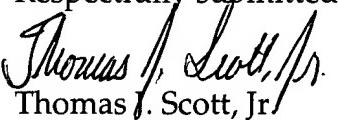
Applicants' believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. 112, first and second paragraph, and respectfully request withdrawal of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Date: April 20, 1998
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004
Tel: (202) 783-0800

Respectfully submitted,

Thomas J. Scott, Jr.
Reg. No. 27,836
Attorney for Applicants

APPENDIX A

APPENDIX A

The following foreign reference has been cited by Applicants in the Information disclosure Statements filed 12-11-95, 12-22-95, 2-6-96, 4-17-96 and 4-7-97. Applicants have further included the following relevancy statement as well as an English abstract (in the case of foreign patents), thus meeting the requirements as set forth in 37 CFR 1.98 and MPEP § 609.

For the Information Disclosure Statement filed 12-22-95:

23 38 330 February 13, 1975 Germany

This reference discloses television receivers that transmit control signals to a decoder/processor combination.

For the Information Disclosure Statement filed 2-6-96:

61-050470 March 12, 1986 Japan

This reference discloses a program engagement device that displays the program content at a television receiver and includes a display output control device.

60-61935 April 9, 1985 Japan

This reference discloses a system that generates, detects, communicates, and/or converts digital signals.

For the Information Disclosure Statement filed 4-17-96:

2 058 681 June 15, 1972 Germany

This reference discloses a television mode arrangement for transmitting, receiving, and presenting coded information.

For the Information Disclosure Statement filed 4-7-97:

0 020 242 December 10, 1980 European

This reference discloses a teletext character alignment process.

0 046 108 February 17, 1982 European

This reference discloses a integrated circuit interface between a television receiver and recorder.

0 049 184 April 7, 1982 European

This reference discloses a pocket teaching aid using a television receiver with a teletext system.

0 055 167 June 30, 1982 European

This reference discloses a teletext CRT display for messages from a composite memory.

0 077 712 April 27, 1983 European

This reference discloses a multi-channel digital packet television broadcasting system.

0 078 185 May 4, 1983 European

This reference discloses a digital packet broadcasting system using television transmissions.

2 496 376 June 18, 1982 France

This reference discloses a teletext display of data on the television screen.

2 516 733 May 5, 1983 France

This reference discloses an error controller for a teletext television decoder.

2 823 175 November 29, 1989 Germany

This reference discloses a teletext information display for television transmission.

24 53 441 May 13, 1976 Germany

This reference discloses a wideband signal transmission with digital to image signal conversion.

DE 30339949 May 6, 1982 Germany

This reference discloses a method for the generation of teletext display having a color character contrast.

DE 3112249 October 7, 1982 Germany

This reference discloses a processing signals from either a colored television receiver or from a video text decoder.

DE 3020787 December 17, 1981 Germany

This reference discloses a television transmission system that sends extra data during a blanking period.

WO 80/00292 February 21, 1980 Japan

This reference discloses a decoder for a television receiver that has a color component that splits signals and recombines the signals into a composite drive current signal.

WO 83/00789 March 3, 1983 Japan

This reference discloses an image display unit which displays received image signals via a memory, wherein the image signals include teletext displays of weather reports or television programs.

Graf, P.H., "Antiope-Uebertragung fuer Breitbandige Videotex-Verteildienste," 1981.

This reference shows an Antiope demodulator/detector.

Heller, Arthur, "VPS - Ein Neues System Zuragsgesteurten Programmanfzeichnung, Rundfunk technische Mitteilungen, pp. 162-169.

This reference discloses a decoding system for use with a VCR.

Marti, B et al., Discrete, service de television cryptee, Revue de radiodiffusion - television (1975), pp. 24-30.

This reference discloses an analog decryption system.

Strauch, D., "(Las Media De Telecommunication Devant la Rapture. Les Nonvellas Methodes Presentees a L'Eposition International 1979 de Radio (Et Television)) 1979.

This reference is a discussion of videotext, teletext, ceefax, oracle, and antiope.

APPENDIX B



INFORMATION DISCLOSURE STATEMENT BY APPLICANT CITATION FORM	Attorney Docket No.	Serial No.
	05634.0312	08/477,711
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 7, 1995	Group Art Unit 2742

UNITED STATES PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	Re 27,810	November 20, 1973	Buehrle	325/321	
	2,418,127	April 1, 1947	Labin	178/44	
	2,563,448	August 7, 1951	Aram	178/5.1	
	3,071,649	January 1, 1963	Goodall	179/1.5	
	3,107,274	October 15, 1963	Roschke	178/5.1	
	3,133,986	May 19, 1964	Morris et al.	178/5.1	
	3,251,051	May 10, 1966	Harries	340/345	
	3,470,309	September 30, 1969	Nyberg	178/5.1	
	3,478,166	November 11, 1969	Reiter et al.	178/5.1	
	3,526,843	September 1, 1970	Sanville	329/104	
	3,546,684	December 8, 1970	Maxwell et al.	340/172.5	
	3,639,686	February 1, 1972	Walker et al.	178/5.8R	
	3,649,749	March 14, 1972	Gibson	178/5.6	
	3,651,261	March 21, 1972	Guanella	178/22	
	3,666,888	May 30, 1972	Sekimoto	178/69.5 TV	
	3,723,637	March 27, 1973	Fujio et al.	178/5.2R	
	3,746,799	July 17, 1973	Gentges	178/22	
	3,755,624	August 28, 1973	Sekimoto	178/69.5 TV	
	3,769,579	October 30, 1973	Harney	325/31	
	3,773,979	November 20, 1973	Kirk, Jr. et al.	179/15 FD	
	3,777,053	December 4, 1973	Wittig et al.	178/5.1	
	3,789,131	January 29, 1974	Harney	178/5.1	
	3,794,922	February 26, 1974	Osborn et al.	325/53	
	3,795,763	March 5, 1974	Golding et al.	178/5.6	
	3,813,482	May 28, 1974	Blonder	178/5.1	
	3,826,863	July 30, 1974	Johnson	178/5.1	
	3,859,596	January 7, 1975	Jannery et. al.	325/31	
	3,882,289	May 6, 1975	Walding et al.	200/11 D	
	3,885,089	May 20, 1975	Callais et al.	178/5.1	
	3,889,054	June 10, 1975	Nagel et al.	178/6.8	
	3,894,177	July 8, 1975	Howell et al.	178/5.6	
	3,896,262	July 22, 1975	Hudspeth et al.	178/5.1	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,896,266	July 22, 1975	Waterbury	179/1 SB	
	3,916,091	October 28, 1975	Kirk, Jr. et al.	178/5.1	
	3,924,059	December 2, 1975	Horowitz	178/5.1	
	3,950,618	April 13, 1976	Bloisi	179/2 AS	
	3,958,081	May 18, 1976	Ehrsam et al.	178/22	
	3,975,585	August 17, 1976	Kirk, Jr. et al.	178/5.1	
	3,990,012	November 2, 1976	Karnes	325/308	
	3,996,586	December 7, 1976	Dillon et al.	340/347 DD	
	4,004,085	January 18, 1977	Makino et al.	340/324	
	4,008,369	February 15, 1977	Theurer et al.	358/84	
	4,013,875	March 22, 1977	McGlynn	235/150.2	
	4,015,286	March 29, 1977	Russell	358/13	
	4,019,201	April 19, 1977	Hartung et al.	358/124	
	4,020,419	April 26, 1977	Caspary et al.	325/421	
	4,024,574	May 17, 1977	Nieson	358/117	
	4,024,575	May 17, 1977	Harney et al.	358/118	
	4,027,267	May 31, 1977	Larsen	329/106	
	4,027,331	May 31, 1977	Nicol	358/135	
	4,042,958	August 16, 1977	Saylor et al.	358/141	
	4,044,376	August 23, 1977	Porter	358/84	
	4,045,814	August 30, 1977	Hartung et al.	358/124	
	4,054,911	October 18, 1977	Fletcher et al.	358/141	
	4,064,490	December 20, 1977	Nagel	364/2000	
	4,070,693	January 24, 1978	Shutterly	358/123	
	4,075,660	February 21, 1978	Horowitz	358/124	
	4,079,419	March 14, 1978	Seigle et al.	358/193	
	4,081,754	Mach 28, 1978	Jackson	325/396	
	4,081,832	March 28, 1978	Sherman	358/124	
	4,086,434	April 25, 1978	Bocchi	79/2 AM	
	4,088,958	May 9, 1978	Suzuki et al.	325/396	
	4,091,417	May 23, 1978	Nieson	358/117	
	4,095,258	June 13, 1978	Sperber	358/120	
	4,096,542	June 20, 1978	Pappas et al.	361/196	
	4,104,681	August 1, 1978	Saylor et al.	358/141	
	4,107,734	August 15, 1978	Percy et al.	358/84	
	4,107,735	August 15, 1978	Frobach	358/84	
	4,112,317	September 5, 1978	Everswick	307/308	
	4,112,383	September 5, 1978	Burgert	329/50	
	4,114,841	September 19, 1978	Muhlfelder et al.	244/166	
	4,120,003	October 10, 1978	Mitchell et al.	358/142	
	4,124,887	November 7, 1978	Johnson et al.	364/107	
	4,126,762	November 21, 1978	Martin et al.	179/2A	
	4,135,213	January 16, 1979	Wintfeld et al.	358/142	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,142,156	February 27, 1979	Freund	325/309	
	4,145,717	March 20, 1979	Guif et al.	358/121	
	4,148,066	April 3, 1979	Saylor	358/127	
	4,156,253	May 22, 1979	Steudel	358/11	
	4,156,931	May 29, 1979	Adelman et al.	364/900	
	4,163,252	July 31, 1979	Mistry et al.	358/118	
	4,180,709	December 25, 1979	Cosgrove et al.	179/2 AM	
	4,199,656	April 22, 1980	Saylor	178/66.1	
	4,199,781	April 22, 1980	Doumit	358/83	
	4,199,809	April 22, 1980	Pasahow et al.	364/200	
	4,207,524	June 10, 1980	Purchase	375/22	
	4,214,273	July 22, 1980	Brown	358/188	
	4,215,366	November 13, 1984	Davidson	358/124	
	4,216,497	August 5, 1980	Ishman et al.	358/84	
	4,222,068	September 9, 1980	Thompson	358/120	
	4,225,884	September 30, 1980	Block et al.	358/122	
	4,245,246	January 13, 1981	Cheung	358/124	
	4,246,611	January 20, 1981	Davies	358/194	
	4,247,947	January 27, 1981	Miyamoto	455/38	
	4,250,521	February 10, 1981	Wright	358/8	
	4,258,386	March 24, 1981	Cheung	358/84	
	4,266,243	May 5, 1981	Shutterly	358/121	
	4,272,784	June 9, 1981	Saito et al.	358/127	
	4,273,962	June 16, 1981	Wolfe	179/7.1R	
	4,292,650	September 29, 1981	Hendrickson	358/123	
	4,295,155	October 13, 1981	Jarger et al.	358/12	
	4,301,542	November 17, 1981	Weintraub et al.	455/353	
	4,305,101	December 8, 1991	Yarbrough et al.	360/69	
	4,310,854	January 12, 1982	Baer et al.	358/143	
	4,316,217	February 16, 1982	Rifken	358/86	
	4,318,047	March 2, 1982	Dawson	328/112	
	4,323,921	April 6, 1982	Guillou	358/114	
	4,323,922	April 6, 1982	den Toonder et al.	358/117	
	4,329,711	May 11, 1982	Cheung	358/114	
	4,335,426	June 15, 1982	Maxwell et al.	364/200	
	4,340,906	July 20, 1982	den Toonder et al.	358/124	
	4,341,925	July 27, 1982	Doland	178/22.17	
	4,343,042	August 3, 1982	Schrock et al.	455/5	
	4,348,696	September 7, 1982	Beier	358/188	
	4,354,201	October 12, 1982	Sechet et al.	358/122	
	4,355,415	October 19, 1982	George et al.	455/185	
	4,358,672	November 9, 1982	Hyatt et al.	235/380	
	4,360,881	November 23, 1982	Martinson	364/493	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,361,848	November 30, 1982	Poignet et al.	358/1	
	4,361,851	November 30, 1982	Asip et al.	358/84	
	4,361,903	November 30, 1982	Ohta	455/2	
	4,365,267	December 21, 1982	Tsuda	358/84	
	4,378,470	March 29, 1983	Murto et al.	179/2 C	
	4,382,256	May 5, 1983	Nagata	340/825.44	
	4,385,384	May 24, 1983	Rosbury et al.	371/22	
	4,386,436	May 31, 1983	Kocher et al.	455/151	
	4,388,643	June 14, 1983	Aminetzah	358/123	
	4,388,644	June 14, 1983	Ishman et al.	358/84	
	4,390,898	June 28, 1983	Bond et al.	358/1199	
	4,390,901	June 28, 1983	Keiser et al.	358/147	
	4,392,135	July 5, 1983	Ohyagi	340/825.44	
	4,393,277	July 12, 1983	Besen et al.	179/2 A	
	4,408,345	October 4, 1983	Yashiro et al.	455/3	
	4,411,017	October 18, 1983	Talbot	455/26	
	4,414,621	November 8, 1983	Bown et al.	364/200	
	4,415,771	November 15, 1983	Martinez	179/5R	
	4,418,425	November 29, 1983	Fennel et al	455/27	
	4,424,533	January 3, 1984	Rzeszewski	358/167	
	4,425,578	January 10, 1984	Haselwood et al.	358/84	
	4,425,579	January 10, 1984	Merrell	358/86	
	4,425,664	January 10, 1984	Sherman et al.	375/8	
	4,427,968	January 24, 1984	York	340/310	
	4,429,385	January 31, 1984	Cichelli et al.	370/92	
	4,430,731	February 7, 1984	Gimple et al.	370/30	
	4,434,438	February 28, 1984	Rzeszewski	358/167	
	4,439,785	March 27, 1984	Leonard	358/120	
	4,450,481	May 22, 1984	Dickinson	358/114	
	4,450,531	May 22, 1984	Kenyon et al.	364/604	
	4,454,538	June 12, 1984	Toriumi	358/86	
	4,468,701	August 28, 1984	Burcher et al.	358/181	
	4,471,352	September 11, 1984	Soulliard et al.	340/825.44	
	4,475,123	October 2, 1984	Dumbauld et al.	358/114	
	4,476,535	October 9, 1984	Loshing et al.	364/480	
	4,484,218	November 20, 1984	Boland et al.	358/86	
	4,484,328	November 20, 1984	Schlafly	370/85	
	4,488,179	December 11, 1984	Kruger et al.	358/181	
	4,489,220	December 18, 1984	Oliver	179/2 AM	
	4,489,316	December 18, 1984	MacQuivey	340/700	
	4,494,142	January 15, 1985	Mistry	358/118	
	4,496,975	January 29, 1985	Noirel	358/147	
	4,504,831	March 12, 1985	Jahr et al.	340/870.03	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,506,387	March 9, 1985	Walter	455/612	
	4,510,623	April 9, 1985	Bonneau et al.	455/181	
	4,528,589	July 9, 1985	Block et al.	358/122	
	4,531,020	July 23, 1985	Wechselberger et al.	178/22.08	
	4,531,021	July 23, 1985	Bluestein et al.	178/22.08	
	4,540,849	September 10, 1985	Oliver	179/2 AM	
	4,543,616	September 24, 1985	Brooks	358/335	
	4,547,804	October 15, 1985	Greenberg	358/142	
	4,554,584	November 19, 1985	Elam et al.	358/165	
	4,558,464	December 10, 1985	O'Brien, Jr.	455/4	
	4,563,702	January 7, 1986	Heller et al.	358/119	
	4,566,030	January 21, 1986	Nickerson et al.	358/84	
	4,570,930	February 18, 1986	Matheson	273/1 E	
	4,578,536	March 25, 1986	Oliver et al.	179/2 AM	
	4,578,718	March 25, 1986	Parker et al.	360/10.3	
	4,592,546	June 3, 1986	Fascenda et al.	273/1 E	
	4,594,609	July 15, 1986	Romao et al.	358/119	
	4,595,952	June 17, 1986	Filliman	358/47	
	4,600,918	July 15, 1986	Belisomi et al.	340/711	
	4,600,921	July 15, 1986	Thomas	340/825.31	
	4,605,964	August 12, 1986	Chard	358/147	
	4,611,227	September 9, 1986	Brockhurst et al.	358/147	
	4,613,901	September 23, 1986	Gilhousen et al.	358/122	
	4,621,259	November 4, 1986	Schepers et al.	340/707	
	4,621,285	November 4, 1986	Schilling et al.	358/120	
	4,623,920	November 18, 1986	Dufresne et al.	358/122	
	4,626,892	December 2, 1986	Nortrup et al.	358/21 R	
	4,633,297	December 30, 1986	Skerlos et al.	358/22	
	4,636,858	January 13, 1987	Hague et al.	358/147	
	4,638,357	January 20, 1987	Heimbach	358/121	
	4,639,779	January 27, 1987	Greenberg	358/142	
	4,646,145	February 24, 1987	Percy et al.	358/84	
	4,649,533	March 10, 1987	Chorley et al.	370/58	
	4,658,290	April 14, 1987	McKenna	358/84	
	4,677,685	June 30, 1987	Kurisu	455/4	
	4,694,490	September 15, 1987	Harvey et al.	380/20	
	4,704,725	November 3, 1987	Harvey et al.	380/48	
	4,706,121	November 10, 1987	Young	358/142	
	4,710,919	December 1, 1987	Oliver et al.	370/96	
	4,710,955	December 1, 1987	Kauffman	380/10	
	4,718,107	January 5, 1988	Hayes	455/4	
	4,723,302	February 2, 1988	Fulmer et al.	455/2	
	4,736,422	April 5, 1988	Mason	380/120	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,744,080	May 10, 1988	Brennand et al.	280/21	
	4,751,732	June 14, 1988	Kamitake	380/20	
	4,754,326	June 28, 1988	Kram et al.	364/900	
	4,768,144	August 30, 1988	Winter et al.	364/200	
	4,768,229	August 30, 1988	Benjamin et al.	380/20	
	4,782,401	November 1, 1988	Faerber et al.	358/335	
	4,785,420	November 15, 1988	Little	364/513.5	
	4,796,181	January 3, 1989	Wiedmer	364/406	
	4,803,725	February 7, 1989	Horne et al.	380/44	
	4,805,020	February 14, 1989	Greenberg	358/147	
	4,809,274	February 28, 1989	Walker et al.	371/37	
	4,816,904	March 28, 1989	McKenna et al.	358/84	
	4,841,386	June 20, 1989	Schiering	360/69	
	4,843,482	June 27, 1989	Hegendorfer	358/335	
	4,855,842	August 8, 1989	Hayes et al.	358/342	
	4,862,268	August 9, 1989	Campbell et al.	358/141	
	4,879,611	November 7, 1989	Fukui et al.	360/69	
	4,885,579	December 5, 1989	Sandbank	340/825.72	
	4,888,796	December 19, 1989	Olivo, Jr.	379/101	
	4,982,430	January 1, 1991	Frezza et al.	380/50	
	4,993,066	February 12, 1991	Jenkins	380/16	

* If Pertinent

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES	TRANSLATION NO
	0 020 242	December 10, 1980	European	G09G 1/16		X
	0 046 108	February 17, 1982	European	H04N 5/76		X
	0 049 184	April 7, 1982	European	G09B 7/08		X
	0 055 167	June 30, 1982	European	G09G 1/16		X
	0 056 649	July 28, 1982	European	H04N 5/44	X	
	0 077 712	April 27, 1983	European	H04N 7/00		X
	0 078 185	May 4, 1983	European	H04N 7/00		X
	1,189,612	June 25, 1985	Canada	H04n 7/08	X	
	1,216,977	June 8, 1983	Canada	H04M 11/00	X	
	1,396,981	June 11, 1975	United Kingdom	H04H 1/00	X	
	1,523,307	August 31, 1978	Great Britain	H03K 5/08	X	
	1,543,502	April 4, 1979	United Kingdom	G08B9/00	X	
	1,582,563	January 14, 1981	United Kingdom	G08B9/00	X	
	1,584,111	February 4, 1981	United Kingdom	G08B9/00	X	
	2,051,527	January 14, 1981	Great Britain	G06F 3/153	X	
	2,067,379	July 22, 1981	Great Britain	H04L 1/24	X	
	2,090,504	July 7, 1982	Great Britain	H04N 3/16	X	
	2,103,455	February 16, 1983	Great Britain	H04N 1/00 7/12	X	
	2,496,376	June 18, 1982	France	H04N 7/00		X
	2,516,733	May 5, 1983	France	H04N 7/00		X
	2,823,175	November 29, 1979	German	G06F 3/12		X
	24 53 441	May 13, 1976	Germany	H04L 9/00		X
	DE 3039949	May 6, 1982	German	H04M 3/42		X
	DE 3112249	October 7, 1982	German	G09G 1/28		X
	80/02901	December 24, 1980	France	H04N 7/16		X
	857,862	January 4, 1961	United Kingdom	40 (1)	X	
	DE 3020787	December 17, 1981	Germany	H04N 7/08		X
	GB 2 081 948 A	February 24, 1982	United Kingdom	H04Q 9/00	X	
	WO80/00292	February 21, 1980	Japan	H04N9/16		X
	WO83/00789	March 3, 1983	Japan	H04N 7/08		X

OTHER DOCUMENTS

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hanas et al., "An Addressable Satellite Encryption System For Preventing Signal Piracy", November 1981, pp. 631-635.
	National Cable Television Association Executive Seminar Series, <u>Videotex Services</u> , October 1980, pp. 1-155.
	Kokado et al., "A Programmable TV Receiver", February 1976, pp. 69-82.
	J. Hedger et al., "Telesoftware-Value Added Teletext", August 1980, pp. 555-567.
	Marti , B., "The Concept Of A Universal "Teletext" June 1979, pp.1-11
	Article re: America's Talk-Back Television Experiment: Qube
	Article re: "Teletext-Applications in Electronic Publishing"
	Article re: A Description of the Broadcast Telidon System, IEEE Transactions on Consumer Electronics, Vol. CE - 26, August 1980
	Article re: EPEOS--Automatic Program Recording System by G. Degoulet
	Article re: Teletext signals transmitted in UK...
	Article re: New services offered by a packet data broadcasting system, no. 149 February 1975
	Article re: Philips TV set indicates station tuning and color settings on screen, Electronics, Nov. 27, 1975
	Vincent,A.et al., "Telidon Teletest System Field Trials" IEEE Transactions on Consumer Electronics, Vol. CE - 27, No. 3, Aug. 1981, pp. 530-535
	Rzeszeewski, T., "A New Telletex Channel"
	Kaplinsky, C.H., "The D**2B A One Logical Wire Bus for Consumer Applications" 1981
	Sechet, C., "Antiope Teletext Captioning" 1980
	Lambert, O. et al., "Antiope and D.R.C.S." 1980
	"LSI Circuits for Teletext and Viewdata -- The Lucy Generation" published by Mullard Limited, Mullard House (1981)
	Nicholas Negroponte in SID 80 Digest titled, "17.4/10:25 a.m.: Soft Fonts", pp. 184-185
	IEEE Consumer Electronics July 1979 issue from Spring Conference titled, "Consumer Text Display Systems", pp. 235-429
	Videotext '81 published by Online Conferences Ltd., for the May 20-22, 1981 Conference, pp. 1-470
	"Teletext and Viewdata Costs as Applied to the U.S. Market" Published by Mullard House (1979), pp. 1-8
	Dalton,C.J., "International Broadcasting Convention" (1968), Sponsors: E.E.A., I.E.E., I.E.E.E., I.E.R.E., etc.
	Shorter, D.E.L., "The Distribution of Television Sound by Pulse-Code Modulation Signals Incorporated in the Video Waveform"
	Chorky, J.M., Shorter, D.E.L., "International Broadcasting Convention" (1970), pp. 166-169
	"The Implementation of the Sound-in-Sync project for Eurovision (Feb. 1975), pp. 18-22, No. 140 E.B.U. Review
	Maegle, Manfred, "Digital Transmissions of Two Television Sound Channels in Horizontal Banking", pp. 68-70
	Weston, J.D., "Digital TV Transmission for the European Communications Satellite" (1974), pp. 318-325
	Golding, L., "A 15 to 25 Mhz Digital Television System for Transmission of Commercial Color Television" (1967), pp. 1-26

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Huth, Gaylord K., "Digital Television System Design Study: Final Report (11/28/76), prepared for NASA Lyndon B. Johnson Space Center
	Weston, J.D., "Transmission of Television by Pulse Code modulation", Electrical Communication (1967), pp. 165-172
	Golding, L., "F1-Ditec-A-Digital Television Communications System for Satellite Links," Telecommunications Numeriques Par Satellite
	Haberle, H. et al., "Digital TV Transmission via Satellite", Electrical Communications (1974)
	Dirks, H. et al., "TV-PCM6 Integrated Sound and Vision Transmission System, Electrical Communication (1977), pp. 61-67
	Talygin, N.V. et al., The "Orbita" Ground Station for Receiving Television Programs Relayed by Satellites, Elecktrovintz, pp. 3-5
	Portions of Electronic Engineer's Reference Book (1989) - Multichannel sound systems, Teletext transmission, cable television, ISDN applications, etc.
	Collin, Simon, PC Text II (Hardware Review (Shortlist), PC User (1990)
	Alfonzetti, Salvatore, "Interworking between teletext and OSI systems," Computer Communications (1989)
	Voorman, J.O. et al., A one-chip Automatic Equalizer for Echo Reduction in Teletext , IIEE Transactions on Consumer Electronics, pp. 512-529
	"Teletext (Broadcast Videotext) Begins in the United States" by Richard H. Veith, Logica, Inc. at National Online Meeting: Proceedings - 1982 sponsored by Online Review, pp. 547 - 551
	MacKenzie, G.A., A Model for the UK Teletext Level 2 Specification (Ref: GTV2 242 Annex 6" based on the ISO Layer model
	Chambers, J.P., A Domestic Television Program Delivery Services, British Broadcasting Corporation, pp. 1-5
	McKenzie, G.A., UK Teletext - The Engineering Choices, Independent Broadcasting Authority, pp. 1-8
	Adding a new dimension to British television, Electronic Engineering (1974)
	Jones, Keith, The Development of Teletext, pp. 1-6
	Ando, Heiichero et al., Still-Picture Broadcasting - A new Informational and Instructional Broadcasting System, IEEE Transactions on Broadcasting (1973), pp. 68-76
	B.B.C.I.B.A., Specification of Standards for information transmission by digitally coded signals in the field - blanking interval of 625-line systems (1974), pp. 5-40
	Tarrant, D.R., "Teletext for the World" (date unknown)
	Clifford, Colin et al., "Microprocessor Based, Software Defined Television Controller", IEEE Transaction on Consumer Electronics (1978), pp. 436-441
	Hughes, William L. et al., "Some Design Considerations for Home Interactive Terminals", IEEE Transactions on Broadcasting (1971)
	Mothersdale, Peter L. , "Teletext and viewdata: new information systems using the domestic television receiver", Electronics Record (1979), pp. 1349-1354
	Betts, W.R., "Viewdata: the evolution of home and business terminals", PROC.IEE (1979), pp. 1362-1366
	Hutt, P.R., "Thical and practical ruggedness of UK teletext transmission", PROC.IEE (1979), pp. 1397-1403
	Rogers, B.J., "Methods of measurement on teletext receivers and decoders", PROC.IEE (1979), pp. 1404-1407
	Green, N., "Subtitling using teletext service - technical and editorial aspects", PROC.IEE (1979), pp. 1408-1416
	Chambers, M.A., "Teletext - enhancing the basic system", PROC.IEE (1979), pp. 1425-1428

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Crowther, G.O., "Adaptation of UK Teletex System for 525/60 Operation", IEEE Transactions on Consumer Electronics (1980), pp. 587-596
	Lopinto, John, "The Application of DRCS within the North American Broadcast Teletext Specification", IEEE Transactions on Consumer Electronics (1982), pp. 612-617
	BBC, BBC Microcomputer: BBC Microcomputer with Added Processor and Teletex Adaptor (Manual)
	Green, N.W., "Picture Oracle," On Independent Television Companies Association Limited Letterhead
	National Captioning Institute, Comments on the Matter of Amendment of Part 73, Subpart E. of the Federal Communications Rules Government Television Stations to Authorize Teletext (before F.C.C.) 03-26-81
	Balchin, C., "Videotext and the U.S.A.", I.C. Product Marketing Memo
	EIA Teletext SubCommittee Meetings, Report on USA Visit
	Brighton's Experience with Software for Broadcast (Draft) 1981
	The institution of Electronic and Radio Engineers, Conference on Electronic Delivery of Data and Software, Pub. no. 69, 9/1986
	AT&T, "Videotex Standard Presentation Level Protocol", 1981
	Various Commissioner statements on Authorization of Teletext Transmissions by TV Stations, BC Docket No. 81-741, 03-31-83
	Report and Order of FCC on the Matter of Amendment of Parts 2,73, and 76 of the Commission's Rules to Authorize the Transmission of Teletext by TV Stations, pp. 1-37, 05-20-83
	IBA Technical Review of Digital Television by F. Howard Steele, pp. 1-64, 6/1973
	National Cable Television Association report, "Videotex Services" given at Executive Seminar, pp. iii-155
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Minutes of Meeting 3/30/81 at Zenith plus attachments
	Electronic Industries Association - Teletext Subcommittee Task Group A -Systems Interim Report, 3/30/81 by Stuart Lipoff, Arthur D. Little Inc.
	Minutes of Electronic Industries Association Teletext Subcommittee Task Force B - Laboratory & Field Tests 3/30/81
	National Captioning Institute Report, "The 1980 Closed-Captioned Television Audience"
	Electronic Industries Assoc. - Teletext Subcommittee - Steering Committee Minutes of Meeting on 3/31/81
	Various Articles following cover sheet titled "QVP - Pay Per View" 11/29/82
	National Cable Television Association report, "Videotex Services" October 1980
	Scala Info Channel Advertisement, "The Art of Conveying A Message"
	Zenith Corporation's Z-Tac Systems information includes Z-tac specifications, access list, etc. (varous articles)
	Report by Cablesystems Engineering Ltd. on, "Zenith Addressable System and Operating Procedures" and Advertising documents, Nov. 1981
	Memo from W. Thomas to G. Kelly on 1/21/82 Re: Modified ZTAC/Multi Channel
	Notations by Walt Ciciora dated 8/19/81 referring to Virtext figures, 8/19/81
	"Preliminay Specification for Basic Text" Stamped Zenith Confidential, 2/17/81
	Petition to FCC dated 3/26/81 titled, "Petition for Rulemaking of Unighted Kingdom Teletext Industry Goup," also 1 page of handwritten notes from Walter Ciciora
	"Enhanced Computer Controlled Teletext for 525 Line Systems (Useccct) SAA 5245 User Manual" report by J.R. Kinghorn, August 1, 1981
	"Questions and Answers about Pay TV" by Ira Kamen, 1973
	Oak Industries 1981 Annual Report

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Article, "50 Different Uses For At Home 2-Way Cable TV Systems" by Morton Dubin
	Derwent Info Ltd. search. Integrated broadcasting & Computer Processing system. Inventor J. Harvey/J. Cuddihy
	"Relevant papers for Weather Channel V PMMC"
	Letter to Peter Hatt Re: BVT: Advisory UK Industry Contact Group, 6/24/81
	Memo RE: Next Moves by British teletext and video proponents toward gaining support of systems in US.
	Memo - Re: British Teletext -- ABC
	Notes to Section 22.4: Simple Block Encipherment Algorithm
	Internal Correspondence to John Meyer from Mike Calder RE: Teletext Business Posture, Sept. 18, 1981 and Internal Correspondence to Mike Calder from John Nemec RE: Trips to Zenith, Sept. 9, 1981
	Memo to Bernie Kotten about National Cable TV Association meeting and efforts to encourage Sony to integrate teletext chip sets into its TV, March 25, 1986
	Kahn, et al., "Advances in Packet Radio Technology,"..... Proceedings of the IEEE, Vol. 66, No. 11, Nov. (1978) pp. 1468-1495
	Clifford, C., "A Universal Controller for Text Display Systems," IEEE Transactions on Consumer Electronics, (1979) pp. 424-429
	Harden, B., "Teletext/Viewdata LSI," IEEE Transactions on Consumer Electronics, (1979), pp. 353-358
	Bown, H. et al., "Comparative Terminal Realizatins with Alpha-Geometric Coding," IEEE Transaction on Consumer Electronics, (1980), pp. 605-614
	Crowther, "Dynamically Redefinable Character Sets--D.R.C.S.," IEEE Transaction on Consumer Electronics, (1980), pp. 707-716
	Chambers, John et al., "The Development of a Coding Hierarchy for Enhanced UK Teletext," IEEE Transaction on Consumer Electronics, (1981), pp. 536-540
	In Re Reexamination of U.S. Patent No. 4,706,121
	U.S. Patent Application by T. Diepholz (Serial No. 266900), filing date 5-26-81
	88908836.5 International Application to John C. Harvey
	Kruger, H. E., "Memory Television, The ZPS Digital Identification System." pp. 1 - 9

EXAMINER	DATE CONSIDERED
EXAMINER:Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).	